Wheel Bar Nose Job!

By Lt. Dan Post

Ask an HT instructor how they feel about attaching the ground-handling wheels to a TH-57, and you probably will get a response along the lines of, "I only put them on if I absolutely have to."

I always have been of the same opinion, and during a cross-country flight to NAS Key West, my feelings of reluctance were validated quite dramatically.

The first step of attaching the wheels is to slide them into place on the skids and pin them into position. Next, slide a hollow, three-foot-long bar onto a small metal arm attached to the wheel. The purpose of the bar is to leverage the entire weight of the helicopter up onto the wheel. The bar must be in the proper position to slide a second pin through the wheel and skid to hold the wheel in place, all the while holding steady the bar and the weight of the helicopter on it.

The process can be done by one man, but two people often will perform the task, with one operating the bar, and the other sliding the pin in place. The most important thing to consider, however, is to respect the bar and to keep your body, especially your face and head, out of the bar's arc of travel. This consideration prevents injury if you lose your grip on the bar, and the force from the helicopter's weight swings the bar free of the wheel.

When our helicopter arrived at NAS Key West, the ground crew instructed us to reposition the helicopter from where we originally had landed to a tighter parking spot. I demonstrated to both my students the proper method to attach the wheels and how to properly position your body to avoid injury. They assisted

me in attaching and then removing the wheels after successfully repositioning the helicopter. I emphasized the importance of remaining clear of the bar and of wearing proper PPE (helmet with visor down and flight gloves on).

Sunday morning was a wet and rainy day, and again we had to attach the wheels to move the helicopter. We put on our PPE and started to attach the wheels as a crew. We made it as far as removing the first of the two wheels before tragedy struck. While my SMAs (student military aviators) were removing the last wheel, the SMA holding the bar and wheel in position to remove the locking pin lost his grip. The bar was flung outward and upward from the wheel. The SMA had adjusted his feet, trying to remain further clear of the bar but, in the process, lost his two-handed grip. As the bar flew upward, it caught his lip, his nose, and the front of his helmet. He received nine stitches, a broken nose, and a slightly dented helmet, but it could have been so much worse.

This mishap goes to show you that no matter how comfortable and proficient you are at performing a task, and even if the proper PPE is worn, the potential for injury always exists. All it took was for the SMA to get about two inches too close to the arc of that bar. Never lose respect for the risk involved with nonflying aspects of naval aviation. Two inches can be the skin off someone's nose.

Lt. Post is a flight instructor with HT-8.

HT-8 is developing a new method of ground-handling wheels installation with a longer bar to help prevent similar injuries.—Ed.

NAVAIR 01-H57BC-1 2.28.6 Ground Handling Wheels
Ground handling wheels have been provided on each of the landing gear skids. These wheels can be extended to provide a capability to move the helicopter on the ground by either pushing or towing.

CAUTION

The ground handling wheels shall be removed prior to flight.

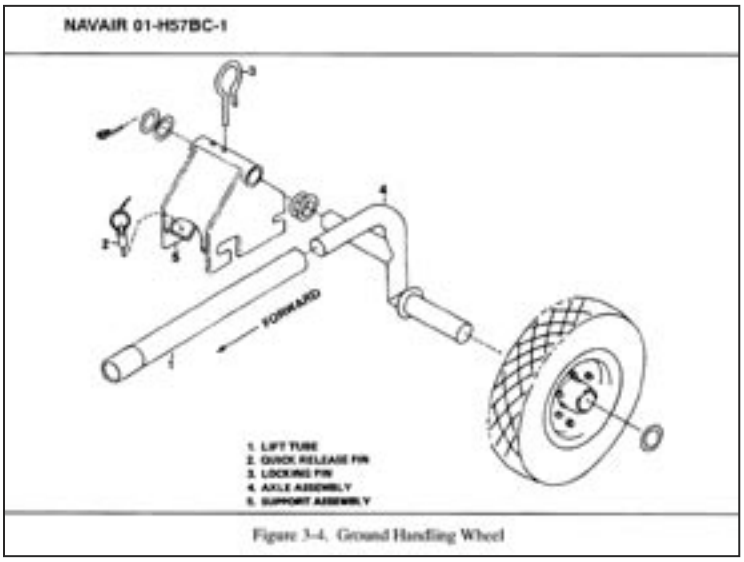

Figure 3-4. Ground Handling Wheel

HT-8 Squadron Operating Procedures

Ground Handling Wheels. While installing ground handling wheels, HT-8 personnel shall wear a helmet with the visor down. Personnel not assigned to HT-8 or the civilian contractor shall not assist in the installation or removal of ground handling wheels, except at military bases when transit line personnel have been appropriately briefed on ground handling wheel procedures.